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(12) **United States Patent**
Hallman et al.

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(54) **MASKED PRESENSITIZED PRINTING PLATE INTERMEDIATES AND METHOD OF IMAGING SAME**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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Related U.S. Application Data

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(51) **Int. Cl.** ⁷ G03F 7/11; G03F 7/16; G03F 7/20

(52) **U.S. Cl.** 430/302; 430/273.1

(58) **Field of Search** 430/302, 273.1

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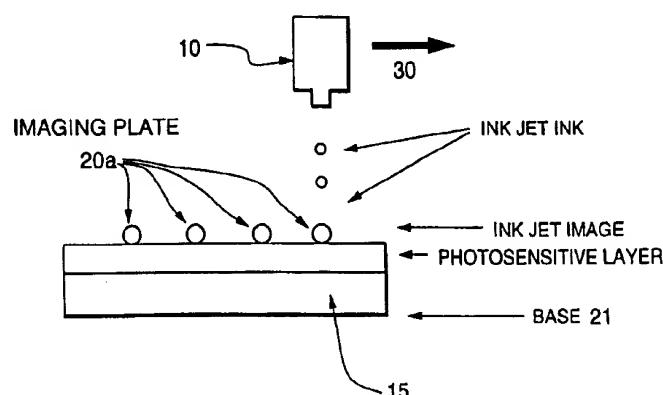
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(57) **ABSTRACT**

A method for forming an image on a printing plate intermediate having a radiation transparent removable coating layer is disclosed. An image mask, opaque to ultraviolet radiation, is applied to the coating layer with an ink jet system. After the plate intermediate is exposed with ultraviolet radiation, the image mask and coating layer are removed, and plate intermediate developed.

21 Claims, 5 Drawing Sheets



W. P. ALLENDOERFER,
AUG. P. CORSH.
WITNESSES:

Having thus fully set forth the nature and merits
of my invention,
I do so far claim as new—
1. A sofa-drum or other equilateral parts of heat-
ing apparatus, the seats employed, or their
backs, or enclosing a permanent fire-light joint between
the ends of the yielding cast portions thereof and the
ends of the ordinary iron or copper portions of said appa-
ratus, consisting of the rings O and O', attached to or
on the ends of said parts, and connecting portions of said appa-
ratus, and from the same proceeding longitudinally outward
in such parts, and from the same proceeding longitudinally outward
as far as the seat parts, substantially as shown and de-
scribed.



US006367381B1

**(12) United States Patent
Kanga**

**(10) Patent No.: US 6,367,381 B1
(45) Date of Patent: Apr. 9, 2002**

**(54) LASER IMAGED PRINTING PLATES
COMPRISING A MULTI-LAYER SLIP FILM**

**(75) Inventor: Rustom Sam Kanga, Marietta, GA
(US)**

**(73) Assignee: Polyfibron Technologies, Inc., Atlanta,
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(22) Filed: Feb. 22, 2000

(51) Int. Cl. 7 G03C 1/815; G03F 7/11
(52) U.S. Cl. 101/395; 101/456; 430/273.1;
430/302; 430/306; 430/327

(58) Field of Search 430/5, 271.1, 273.1,
430/302, 306, 309, 327, 328; 101/456,
467, 395, 401.1

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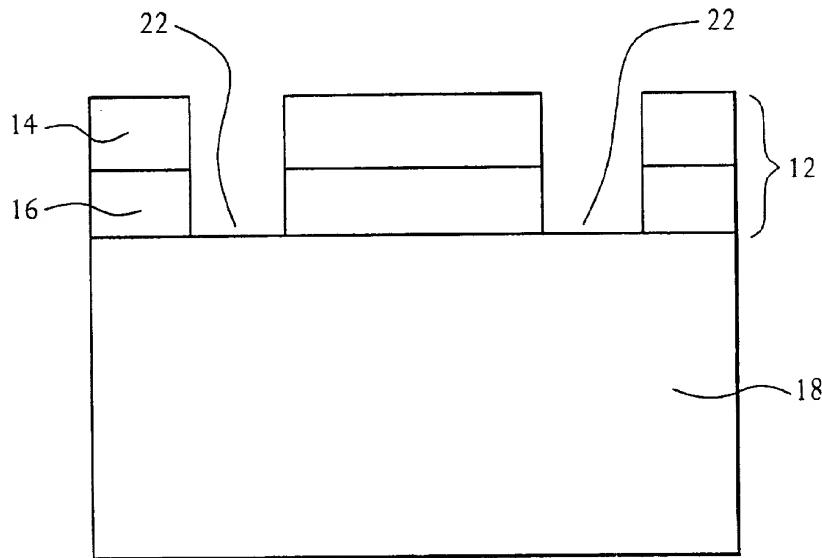
Primary Examiner—Stephen R. Funk

(74) Attorney, Agent, or Firm—Woodcock Washburn LLP

(57) ABSTRACT

The present invention provides a method of making a laser imaged printing plate. First, a solid, uncured printing plate is modified with both a UV absorber and an IR absorber. This is most conveniently done by constructing a multilayer slip film comprising at least two layers wherein at least one layer comprises a strong UV absorber, and wherein at least one other layer comprises an IR absorber having high absorptivity. The multilayer slip film is already adapted for use with a printing plate and is applied in the usual fashion to the surface of the uncured printing plate. The printing plate with the multilayer slip film can be stored for a time, or used immediately, as the printer's needs dictate. In use, the multilayer slip film is ablated from the photopolymer using an IR laser operating at a selected wavelength to create an in situ negative. The resulting negative can be subjected to typical UV flood exposure and development.

19 Claims, 2 Drawing Sheets



the Bosphorus remained as in those letters. Part of the same.

IMPROVEMENT IN HEATING APPARATUS.

Letters Patent No. 112,233, dated February 28, 1871.

MICHIEL, G. FAGAN, OF TROY, NEW YORK, ASSIGNEOR TO HIMSELF,
AND ALBERT G. COUSE, OF SAME PLACE.

United States Patent Office.